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This monograph asks if isolation of the enemy prior to offensive urban operations contributes to the disintegration of the enemy. Isolation is used to exploit critical vulnerabilities, especially soldier will and unit organization. Isolation is accomplished by, isolating the enemy from external and internal support; disrupting the enemy's command, control, communications, computers and intelligence (C4I); controlling key infrastructure; psychologically isolating the enemy from noncombatants; and controlling avenues of approach and key terrain. The Russian military's experiences fighting Chechen separatists in Grozny demonstrate the difficulties of defeating a determined enemy in urban operations.

The monograph concludes that isolation causes the disintegration of the enemy, paving the way for the final defeat of a weakened enemy. Isolation reduces the defender's effectiveness because the defender cannot sustain its forces, exercise command and control, exploit key infrastructure, retain legitimacy with noncombatants, and control avenues of approach.

# Isolate Before An Urban Attack

A Monograph
by
Major Paul J. Wille
Infantry

School of Advanced Military Studies
United States Army Command and General Staff College
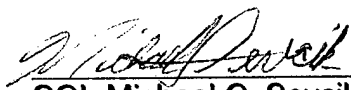Fort Leavenworth, Kansas

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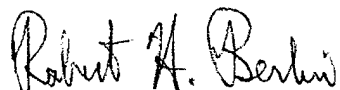
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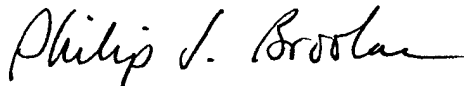
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# CHAPTER 1: Introduction

US military forces must prepare for urban operations. In an area that holds important US interests, and where the international community expects US involvement, US military forces will deploy to protect US interests. The US military cannot expect that protecting these interests will occur on open fields, and involve only an easily identified opponent.

Does isolation of the enemy prior to offensive urban operations contribute to the disintegration of the enemy? This monograph demonstrates that isolation contributes to the disintegration of the enemy. In fact, a successful urban attack depends on isolation of the enemy. How much isolation is enough? The longer and more completely, an enemy is isolated, the more easily an attacking force will achieve its objective. The amount of time available to evict an opponent from the city is the key determinant.

Urban operations are important for several reasons. One reason why preparing to execute urban operations is important is that US forces frequently conduct operations in urban areas. Just a few of the locations include: Panama City, Panama in 1989, Kuwait City, Kuwait in1991, Mogadishu, Somalia in 1991 and 1992-1993, Port au Prince, Haiti in 1994, Sarajevo, Bosnia-Herzegovina in 1992-2000, and currently in Pristina, Kosovo. As the US continues its role as a world leader, she will continue to use military forces to enforce and keep peace in most areas of the world.

The importance of urban operations is further emphasized when the cost of fighting a resistant enemy in the city is compared to US interests in the region. Preparation of US forces to fight in cities is one way to reduce costs that may exceed the value of political goals. One way to mitigate the potentially high cost in US lives and resources is by isolating the enemy in an effort to cause the enemy's disintegration. After the defender's will and physical ability to resist disintegrates the attacker is less reliant on attrition to cause the defender's final defeat. Normally, however, the attacker will use attrition and maneuver warfare to achieve a decision.

The need to prepare for urban operations is imperative because U.S. forces can not avoid combat in urban areas. Since US military power is projected after giving the enemy advance warning throughout a diplomatic process, US forces cannot prevent an opponent from preparing an urban defense. Moreover, due to tactical and technological dominance of the U.S. military, enemy commanders will use cities as part of an asymmetric strategy. By fighting the U.S. military in urban areas, the enemy mitigates U.S. technological and numerical superiority. Defending in urban areas also allows the enemy more time to gain allies and international support, or reorganize for future operations. A weaker opponent may use cities as sanctuaries. This is the operational pattern of the future threat in small scale and regional conflicts. After US adventures with Saddam Hussein, Mohamed Aidid, and Slobodan Milosevic, frustration may mount over the US inability to bring regional conflicts to an end and allowing dictators to enjoy a safe haven in their capital cities.[1] The argument posed by opponents of fighting in cities is not valid. It is true that US forces should avoid urban combat, however the US military cannot depend on the enemy voting in deference to US strengths. Moreover, US forces should not allow the enemy sanctuary, similar to that enjoyed by the North Vietnamese in Laos and Cambodia during the Vietnam War.

The world is becoming more urbanized. A greater percentage of the earth's surface, as well as greater concentrations of the earth's population, make the possibility of urban operations more likely than in the past. As larger portions of the earth's population concentrate in cities so will a country's economic foundation, such as manufacturing, industry, and technology resources. People living in cities are more dependent on services, such as water, electricity, transportation, and communication than those in less densely populated areas. The political support among urban dwellers may become a political object worthy of military force, especially if the opponents need popular support for legitimacy. Likely centers of gravity in a conflict include urban areas and the city's inhabitants. Cities often hold political and psychological importance and frequently provide the key to logistics and movement.[2]

Urban operations require significant preparation because of a city's complexity. The U.S. Army's manual, FM 3-0 (DRAG) *Operations,* recognizes the complexity of urban operations, "Army forces conduct urban operations in large, densely populated areas with distinct problems in clearing enemy forces, restoring services, and managing major concentrations of people."[3] A city is a complex environment, not only due to the multi-dimensional areas created by buildings, but also due to the people and their culture. A United States force that fails to educate itself on the people and culture of the urban area where they conduct operations will find itself psychologically isolated from the city's inhabitants.

Thinking about urban operations is also important because poorly executed urban operations require large forces. The US government does not maintain the political will, nor the military force structure, to sustain heavy casualties that frequently occur in a city fight. Lack of political will and force structure is balanced against the need to use ground forces to bring resolution to a conflict, such as seen in NATO's conflict with Serbia in 1998. This is especially true if someone, or something, in the city is the opponent's source of power.

Further multiplying the difficulties discussed above is the requirement for restrictions on collateral damage. Overcoming restrictions that protect noncombatants and their homes will demand a military that is well prepared to conduct urban operations.

Advocates of avoiding all urban operations argue that attrition warfare is the means of winning in the city. Ground forces start at one end of a city and clear each room, building by building, block by block; trading life for life through the grueling process. U.S. forces can not seek to fight according to the enemy's script. Nor, does the U.S. military have the force structure to sustain large losses. An element of attrition warfare is necessary, but only after the enemy is isolated, and the effects of isolation begin to disintegrate the enemy. By isolating the enemy first, US forces will increase their chances for success. In the battle for Berlin, the Russians suffered 102,000 dead, against a weakened, demoralized Germany. The death of

eighteen U.S. soldiers in Somalia is considered high in relation to our national interests in many small-scale contingencies.

Some pundits opt for razing the urban area, simultaneously killing the enemy as the building collapses. Destroying a city normally does not contribute to the U.S. National Security Strategy. Massive death and human suffering associated with destroying a city would cause domestic and international condemnation. The Russian military's destruction of Grozny is not upheld as a preferred method of conducting urban operations.

Opponents also argue that it is a waste of resources for the US military to prepare for urban operations in the future. U.S. forces, the opposition argues, have not fought sustained urban operations in thirty years, only military operations other than war (MOOTW) and the Persian Gulf War.[4] On the opposite side of this argument is that the U.S. should have two active, and one national guard, "urban combat divisions".[5] Each of these arguments contain weaknesses. The argument that the U.S. has not fought a sustained fight in thirty years is true, however U.S. forces have fought many urban battles in Vietnam, Korea, and World War II. While U.S. forces have not fought a sustained urban operation in thirty years, it does not mean we will not in the future. The US will not always fight a cooperative Panamanian or Haitian military. Both of these militaries surrendered without significant fighting and bloodshed. Moreover, US interests in the future could exceed the interest the US had in Somalia. While US political leaders find human suffering tragic, they did not consider US interests in Somalia greater than the cost of eighteen US soldiers lives. Less than vital US interests will not support the political will necessary to use US soldiers in urban combat.


## Case Study and Methodology

Russia's experience in Chechnya, from 1994 to present, provides an example of how isolation can dominate in offensive urban operations. This case study contains two distinct

parts. The Russians did not isolate their opponent before the first offensive operation by preventing the Chechens from communicating, sustaining, and reinforcing. In the second operation, the Chechen rebels were effectively isolated by the Russians before the attack on Grozny. An attacker should seek to isolate five things for successful urban operations, the enemy's means of support, the enemy's C4I, control key infrastructure, isolate the enemy by establishing greater legitimacy, and isolate the enemy by controlling avenues of approach. After analyzing the role isolation played in each category, the author compares and contrasts how the factors of isolation contribute to the disintegration of the enemy. Discussion of how the attackers could use the factors of isolation more effectively to defeat the defenders. The measures of effectiveness are the effects of isolation the Russians achieved that cause their enemy's units to disintegrate. These effects include degradation of the enemy's logistic, command and control, reduced effectiveness of enemy information operations, and reduced public and international support for the enemy. The environment in which military forces conduct urban operations is complex and probably the most difficult environment to conduct any operations.

# CHAPTER 2: The Threat Environment

## Physical and Psychological Characteristics of the Urban Environment

The sheer size of cities in 2000 create a complex environment, requiring special doctrine, training, and equipment for military forces conducting urban operations. The statistics are staggering. Forty-five percent of the world's population live in urban areas.[6] Over 160,000 people per day migrate to cities. Over the past fourty years, the number of people inhabiting cities has more than tripled from 737 million to 2.5 billion.[7] In 2015, the population in twenty-seven cities will exceed ten million.[8] By 2025, eight-five percent of the world's population will live in urban areas.[9] The tremendous increase in the population of cities will make what is now a difficult operation even more so, and more likely, in the future. In 1950, the population of Seoul was approximately 1.5 million people and that of Manila about 1 million. The population of Seoul increased to 4.4 million by 1970, and today has grown to 12.8 million. Manila's population experienced even greater growth, increasing to 7.3 million in 1970, and then 18.7 million now. The geographic size of cities also increased in correlation to the size of the population.[10] Considering the force structure used to defend and seize these cities in World War II and the Korean War, compared to the size of the cities and US military force structure in 2000, the US military can ill-afford to postpone preparations for urban operations.

The size and number of large cities in the world are easy to quantify. Less quantifiable, but just as important for understanding the complexity of urban areas, is what Ralph Peters calls, the "human architecture" of a city. Human architecture is classified as hierarchical, like cities in America; multicultural, such as Jerusalem; and tribal, one example is Mogadishu.[11] The elements of human architecture include: degree of organization, type of government or ruling system, economic well-being and opportunities, infrastructure, social and ethnic struggles, and competing values, just to name a few. These considerations contribute to the complexities a military force must address at any level of war to achieve its objective. Peters

further states, "Man's complexity is richer than any architectural detail. It is, finally, the people, armed and dangerous, waiting for exploitable opportunities, or begging to be protected, who will determine the success or failure of the intervention."[12] The complexity of the human dimension, combined with the physical dimension, make urban areas an environment that potential US opponents can use to their advantage.

## Threat Strategy

Due to the lack of preparation of US forces for urban operations, and the dependence US forces have on technology that is ill-suited for fighting in cities, a resistant and adaptive enemy may leverage the urban environment in an asymmetric strategy. FM 3-0 recognizes this probable enemy action, "The topography and proximity of noncombatants degrades the effectiveness of technically advanced sensors and weapons, redressing some of the asymmetry between Army forces and potential opponents. Thus, cities become a likely battleground in which the weaker enemy attempts to negate the advantages Army forces enjoy in more open terrain."[13]

The opinion that a weaker opponent will use urban areas to mitigate US advantages is well supported in several studies. Research at RAND also addresses enemy actions,

> The possibility [exists] that an overmatched adversary confronting the United States will invite battle in their own urban environment as part of an *asymmetric strategy*. Such a strategy seeks to apply one's strength to an adversary's perceived weaknesses, knowing that a strength-on-strength approach would be less profitable. Putting a strong opponent into unfamiliar and complex territory, blunting his edge in information gathering and command and control, and setting him among an unfriendly population are all tactics that embody asymmetric thinking.[14]

Although a US enemy may begin fighting from a position of weakness, the enemy can learn from their mistakes, and adopt asymmetric tactics and strategy. These perceptions are reinforced by the 1997 Annual Report to the Chief of Staff of the Army on the Army After Next Project,

Red's learning curve rose sharply as the wargames progressed. Confronted by overwhelming combat power, he resorted to asymmetric responses in an effort to offset Blue's advantages. He recognized early on that Blue's superiority, particularly in firepower and information dominance, eroded over time. Any action that heightened ambiguity or complexity, and thus increased the time Blue needed to gain control of the situation, benefited Red. Therefore, Red moved rapidly to complex terrain-urban, suburban, and in some cases, forests and mountains.... The lesson is obvious. For the 2020 Blue forces, time is the worst of enemies.[15]

FM 3-0 defines asymmetric warfare as avoiding enemy strengths and concentrating own advantages against the enemy's relative weakness. Asymmetry address dissimilarities in organization, doctrine, capabilities, and values between a force and allied and enemy forces.[16] Further explanation of asymmetric warfare in FM 3-0 highlights the how the enemy will force the US military to limit its options, and react to enemy initiatives, "Asymmetric attack requires the disadvantaged side to alter rules of engagement, organization, doctrine, training and equipment. This allows the enemy to force their adversary to adapt, placing the adversary at a disadvantage."[17]

Russia's conflict in Chechnya is an example of a weaker opponent utilizing an urban area as part of an asymmetric strategy. The Russian military is conducting urban operations in Chechen cities because the Chechen rebels use an asymmetric tactic of "successive cities." The rationale for this tactic was that by drawing the Russians into the urban environment, the militants can reduce the advantage the Russians hold in firepower, mobility, and numbers while hiding among, and recruiting, local inhabitants.[18] Further contributing to the Russian's difficulties, but helping the Chechens, is lack of mobility in the cities. Since the Chechens grew-up on the city's streets, and the Russians are unwelcome visitors, the Chechen's familiarity with Grozny gave them a mobility advantage.[19] If U.S. forces allow the enemy to employ this tactic, the enemy will gain a refuge, control the city, and dodge decisive attacks by U.S. forces.[20]

The US political and military leaders cannot afford to assume that a "weak" enemy cannot inflict large numbers of casualties while achieving its political goals. The future threat is

a complex system, its parts are interrelated and self-organizing. This complex threat adapts to the environment, using the environment to its advantage, rather than responding passively with weak symmetric responses.[21] Although the threat uses non-standard organizations and formations, it uses predetermined goals that provide coherence, connection, and information flow which brings balance between chaos and order.[22] While this order may appear disorderly it is able to respond quickly, because it does not follow traditional rules. It must use this system because it lacks high technology equipment that can overcome the slow responses of traditional, hierarchical structures. The threat will not fight without technology. They will leverage low technology, such as cell phones, computers and internet access, and cheap radios, as well as visual signals and messengers.[23]

The threat is expected to use surprise in its offensive operations to gain its operational objectives. Next, the enemy will defend, using decentralized operations, in an urban area, where it expects to have sanctuary due to restrictions on US use of force. Once inside the city, the enemy will make extensive use of air defense artillery ambushes, close combat defense, movement timed to intelligence, surveillance and reconnaissance (ISR) patterns, night operations, civilian population and manipulation of US coalition partners. During this time the enemy will strike at US intangibles, the perceived US weakness. These targets are US political will, public support, doctrine, strategy, and alliances and coalitions.[24]

Consider this scenario, Slobodan Milosevic attacks Montenegro, forcing the US and NATO nations to attack Serbia with air and ground forces. To gain time to reorganize his forces and allow international opinion to shift in his favor, Milosevic uses the majority of his remaining forces to defend Serbia's gains by defending large cities such as Skopje, Pristina, and Belgrade. He also mitigates U.S. advantages in firepower. The Serbs predict that high U.S. casualties will weaken U.S. political will, creating a more favorable Serbian position at negotiations. Slobodan Milosevik will force US leaders and the rest of NATO, to decide

whether or not the value of the political object is worth the cost of fighting on the ground in the cities.

Serbia could use urban operations in an asymmetric strategy against NATO. Slobodan Milosevic did not give-up because Belgrade was being destroyed. He met NATO demands when his ground forces, his key to retaining power, and his center of gravity, were threatened with destruction. When the KLA ground forces offensive forced the Serbs to mass for greater protection, the Serbs became more vulnerable to NATO air power.[25] Another important part of Milosevic's strategy was to "wait-out" NATO and allow international pressure, to halt NATO's bombing operation. This willingness to sacrifice Serbia's infrastructure, and "wait-out" NATO's resolve lends itself to using an asymmetric strategy of defending in urban areas. Milosevic demonstrated a lack of commitment to Serbia's cities during NATO bombing. NATO ground forces could overwhelm the Serbs in rural areas. However, Serb forces could negate U.S. and NATO technology in the urban environment, just as the Serbs did by dispersing and hiding in restrictive terrain during the NATO bombing. Moreover, many NATO allies would loath non-combatant casualties, even if a ground force option were agreed to by the NATO members. Now that the Kosovar Albanians have demonstrated their equal propensity toward atrocities and ethnic cleansing, U.S. citizens would likely provide little support for the cost of fighting in the urban environment. During the urban operations the Serbs may also use this time to gain allies and open a second theater of war, such as Korea.

Conducting urban operations is a U.S. weakness from an equipment, training, doctrine, manpower, and strategy point of view. U.S. ground forces are too few to conduct major sustained offensive urban operations. Since this U.S. weakness is well known a weaker but smarter enemy, may use a strategy that exploits the asymmetrical advantages of urban operations. There is no quick decisive victory, of the kind preferred by the U.S., in urban operations. If a quick decisive victory were possible in an urban area, then Russia's military

would have defeated the Chechen independence movement in several hours with one brigade, as one short-sighted Russian commander predicted in December 1994.

## Russia's Involvement in Chechnya

Chechnya was forcibly annexed by Russia in the 19th century after a holy war led by Muslim leader Iman Shamil, which ended with his capture in 1859. The Russians expelled 500,000 Chechens from their homes, sending them to Turkey. A brutal twenty-five year struggle, including eighteen Chechen revolts, ensued to subdue the Chechens. The Chechens unsuccessfully attempted to gain independence during the Russian Civil War in 1917-1920. During World War II, the Chechens again attempted to gain independence by joining the Nazi's anti-Communist campaign. In retaliation, the Soviet government exiled the Chechens to the Central Asian deserts, where thirty to forty percent of the Chechens died.[26] One of these exiled Chechens was one year old Dzhokar Dudayev.[27] Chechnya then declared independence on 6 September 1991 under a new government led by former Soviet Air Force General Dzhokar Dudayev.

The Russian government is attempting to reestablish its control over Chechnya. Fearing that if Chechnya successfully gains independence, Russia will quickly lose control over the rest of the North Caucasus region and access to Caspian Sea oil. Chechnya is located on the transportation hub between Russia and Azerbaijin.[28] Russian leaders allowed Dudayev to remain in power for three years before making serious attempts to remove him. After fruitless and embarrassing coup attempts and clandestine operations, Russian President Yeltsin ordered a deployment of regular Russian forces to Chechnya on 11 December 1994. However, the mission was poorly planned and prepared. In the first battle for Grozny, in January 1995, the Russian armed forces quickly realized they had underestimated their enemy. The Russians took Grozny, however the Chechen rebels regained the city in August 1996.[29] In 1996 Russian

forces assassinated President Dudayev. The current invasion of Chechnya was prompted after Chechen insurgents invaded Dagestan, and Chechen terrorists killed 300 people in Moscow and Dagestan bombings.[30]

The Chechen's strategy is to exploit the current weakness of the Russian state, the instability of the Caucasus region, and Islamic nationalist fervor to create an independent Muslim state. Chechen leaders realize that Chechnya, by itself, does not have the economic resources for sovereignty. Chechnya needs Dagestan's access to Caspian Sea oil resources, control of key transportation infrastructure, and critical lines of communication to attain official recognition and court foreign investment.[31] The Chechens are weakening the will of the Russian people and military by killing as many Russian soldiers as possible through their tactic of successive cities. Although the Russian people did not support the first battle for Grozny, the Russian government was able to gain public support, and sought international support, for attacking the rebels again in late 1999 by calling the renewed offensive an antiterrorist action.[32] The Russians were much more successful in the current battle for Grozny. The primary reason for the Russian success is the actions the Russians too to isolate the Islamic rebels.

# CHAPTER 3: Isolating the Enemy

FM 101-5-1 *Operational Terms and Graphics* defines isolate is a tactical task given to a unit to seal off (both physically and psychologically) an enemy from his sources of support, to deny an enemy freedom of movement, and prevent an enemy unit from having contact with other enemy forces. An enemy must not be allowed sanctuary within his present position.[33] JP 3-06 First Draft *Joint Urban Operations* defines isolate, at the operational level, as cutting the adversary off from the functions he needs to be effective. Isolation occurs during shaping operations.[34]

> Isolation involves physically and psychologically separating an adversary from his urban support base, limiting his mobility and communication, and negating his ability to acquire useful intelligence on friendly operations. Isolation activities shape our adversary's perceptions and behavior and limit his options before hostilities begin.[35]

Isolation must focus on the entire battlespace. Battlespace is defined in JP 1-02.3 as the environment, factors and conditions which must be understood to successfully apply combat power, protect the force, or complete the mission. This includes the air, land, sea, and space. Battlespace includes enemy and friendly forces, facilities, weather, terrain, the electromagnetic spectrum, and information environment within the operational areas and areas of interest. JP 3-06 First Draft, expands this definition of battlespace to include manmade terrain, population, and infrastructure.

Isolation is critical to the success of urban operations. A study generated by the U.S. Army Human Engineering Laboratory found that,

> Isolating the defense is apparently very effective. The attacker won all four cases in which the defense was totally isolated. Even partial cut-off of the defenders resulted in attackers enjoying a success rate of eighty percent. Conversely, attackers won only fifty percent of the battles in which defenders were not significantly cut off. No single variable appears more consistent than isolation."[36] These statistics are supported by Marine Corps doctrine that observes, "...total isolation does not appear necessary. The key to the attacker's success is in stemming the unimpeded flow of manpower, supplies, and weapons to replace the defender's losses.[37]

The US military is not ignoring the need to think about urban operations. Developing U.S. joint doctrine includes four operational level concepts for executing a large urban operation. The four operational level concepts are: preclusion/preemption, denial, containment, eviction.[38] Isolation of the enemy to cause the enemy's disintegration is a method of evicting the enemy from an urban area.

Isolation is used to exploit critical vulnerabilities, especially soldier will and unit organization. By isolating the enemy, disintegration attacks the individual and organizational mind of the combatants. The opponent's organization is defeated by attacking the soldier's will, unit cohesion, and teamwork. Once these elements of an opponent's organization are destroyed, the organization will cease to function.[39] Disintegration, as a defeat mechanism, is less costly in the urban environment than attrition. Disintegration attacks more directly at the will of the enemy soldiers and unit cohesion than dislocation, which focuses on the mind of the enemy leadership.

Disintegration is effective in cities due to the compartmentalization of the environment. Compartmentalization, created by walls, floors, ceilings, and buildings, begins the isolation of units and soldiers into small elements. Urban operations depend on small unit tactics, such as fire team and squad level. At this level, success in an urban environment depends heavily on soldier will and unit organization. Isolation makes disintegration possible because isolation attacks key elements of soldier will and unit organization.

Isolating the defender before an attack is part of the indirect approach. When urban operations cannot be avoided, other strategists argue for the indirect approach. The indirect approach, which the enemy uses to isolate and force the enemy to surrender, is an excellent method of employing a smaller force in urban operations.[40] At a minimum, the enemy must be isolated to weaken, and prevent reinforcement and resupply. At some point, however, ground forces must conduct offensive operations to force the final surrender of the enemy.[41] It would be idealistic to believe that all of the enemy would surrender, even if there was time available to

isolate the enemy for an extremely long time. In the time the decision is made to intervene in a conflict, the enemy would stockpile supplies to meet their needs. Isolation alone will not stop the enemy.

The five factors of isolation are interrelated and complementary. The attackers actions to isolate the enemy with one contributing factor affects the other four factors of isolation. For example, if an attacker gains control of radio and television stations in the city, either by physical control, or electronic jamming, the attacker controls key infrastructure. The defender cannot use the infrastructure to enhance the organization's C4I. Less C4I capability makes synchronizing operations and coordinating logistics difficult. The enemy is also less able to communicate with the city's inhabitants and the international community to attempt to gain legitimacy and support.

The five factors of isolation attack soldier's will and unit organization. Isolation is accomplished by, isolating the enemy from external and internal support; disrupting the enemy's command, control, communications, computers and intelligence (C4I); controlling key infrastructure; psychologically isolating the enemy from noncombatants; and controlling avenues of approach and key terrain. Each of these factors is discussed separately in further detail.

## Isolate a Defender from External and Internal Support

Support, as defined in FM 101-5-1, is the action of a force which aids, protects, complements, or sustains another force in accordance with a directive requiring such action. A part of any unit held back at the beginning of an attack as a reserve.[42] The definition for isolation in JP 3-06 First Draft includes external and internal support. Physical support, such as medical, financial, material, and reinforcements is the focus of this form of isolation. Support

from non-combatants is part of external support, however it is discussed later as a separate factor of isolation.

External and internal support provides the enemy with the physical means to resist. Isolation prevents the enemy from committing a reserve, conducting casualty evacuation, and resupplying itself with personnel, ammunition, medical supplies, food, and water. Reducing the defender's physical means to resist is not the endstate the attacker seeks to achieve. Isolating a defender is an attack on the enemy soldier's will and unit organization.

Isolating the defender from its support causes disintegration of the enemy unit organization. The credibility of the enemy's leaders and the cause come into question when soldier's perceive that their leaders cannot supply the minimum required support necessary to continue fighting. Without leader credibility soldiers will feel less loyalty to the leaders, will not take risks for the leaders, and eventually desert the unit and the cause. Soldiers rightfully expect to receive the material support needed to execute their assigned mission. Without the support for the mission the soldier's will begins to waver and with the combined effects of isolation and a determined attack soldiers will lose the will to resist.

By isolating a defender from external and internal support, the attacker also creates competition among elements of the defender's organization for personnel, supplies, medical support, and reinforcing actions. This competition can result in mistrust, envy, greed, or even fighting between the parts of an organization. This is another effect isolation seeks to achieve, the disintegration of the defender's cohesion. Whether the enemy is organized traditionally in squads, platoons, and companies, or non-traditionally in tribes or gangs, factionalism will result as these organizations compete for resources. In areas where a coalition is built among several tribes the enemy coalition is especially vulnerable to disintegration of the coalition. This effect is multiplied through psychological and information operations.

Isolating a defender from external and internal support is achieved by taking several actions, sequentially or simultaneously. An attacker must create rings around the city which

block all avenues of approach into and within the city to prevent enemy access to support coming from outside and inside the city. Attacking the defender's communications will make logistics coordination more difficult; the factor of isolation discussed in the next section of this chapter. Controlling key infrastructure and services, another factor of isolation, also affects a defender's ability to meet its logistics needs.

Although these three factors listed above are expanded upon later in the chapter, a brief description of how these factors contribute to isolating the defender from forms of support is important for communicating how support is interrupted. First, while material support is blocked at the outskirts of the city, it must also be stopped at the source to isolate the enemy. Supplies shipped by allies, arms dealers, or through the black market can be interdicted at key entry points into the country and city where the operation is being conducted.

An operational level commander may use available forces to establish a maritime exclusion zone and secure ports and waterways using naval resources. Isolating the enemy is increased by securing airports and airspace through the use of air and ground forces. Air and ground forces can prevent the enemy's use of ground transportation by establishing checkpoints and patrolling the borders and avenues of approach, including subterranean passages.

Safe passage corridors allow the country's economy to remain as functional as possible. The use of safe passage corridors is designed to establish the attacker's legitimacy with the city's noncombatant inhabitants. Psychologically isolating the defender from the city's civilian population, covered as the fourth factor of isolation, reduces the defender's ability to recruit combatants from inside the city. While preventing external reinforcement is a matter of physically isolating the enemy, preventing internal reinforcement is a matter of psychologically isolating the enemy from non-combatants. Psychological isolation of the enemy from non-combatants is gained when friendly forces establish greater legitimacy with the local population than the enemy.

Intercepting financial transfers is another method an attacker can use to isolate a defender from their means of support. Without the funds to buy weapons, ammunition, and supplies, the enemy's ability to fight diminishes quickly. Stopping an opponent's financial support is accomplish by political means and information warfare. The defender is isolated diplomatically, so the enemy's allies no longer provide support. In addition, the attacker intercepts and diverts financial transfers intended to support the enemy.

Intelligence required to identify the enemy's external financial sources should be provided to the operational commander from the appropriate intelligence organization. When the financial sources are identified, the Department of State or, as appropriate, the Department of Defense, should support the commander by first using diplomacy to prevent further transfers of money to the enemy. If diplomacy fails in stemming the flow of money, the Department of Defense and the CIA has the capability to interdict money transfers. This is an area of isolation that requires NCA support to be effective. Authorization for preparing to stop funds requires NCA approval, however the operational commander could decide when best to trigger the action.[43] The ability to accomplish this task is quite literally child's play.

Another way of ending external support to the enemy is through the use of operational fires. Fires could target financial supporters, such as Osama Bin Laden. On August 20, 1998 the US fired approximately sixty cruise missiles into Afghanistan in an attempt to kill bin Laden at what President Clinton referred to as a "gathering of key terrorist leaders."[44] Although the attack was unsuccessful in killing Bin Laden, it does illustrate how to reduce external support to a defender.

The Russian military did not attempt to isolate the Chechen rebels before the first attack into Grozny in December 1994, but they did in the second attack five years later. The effects on the militants of isolation before the second attack made the Russian attack considerably more successful.

# Russian Isolation of the Chechen Support

The Russians unsuccessfully attempted to isolate their Chechen opponents from external and internal support in the 1994 to 1996 battles for Grozny. In the more recent experience the Russians demonstrate that they learned the importance of isolation.

The Russian experience demonstrates isolation of the enemy should be conducted before friendly forces attack, rather than after. Initial Russian attacks on Grozny in December 1994 were unsuccessful for several reasons, however the most important reason was due to the Russian's failure to isolate the Chechen rebels. Supplies flowed into Grozny at the south end of the city, where the Russians did not block key supply routes. Reliable casualty evacuation, during this time, maintained Chechen soldier's moral and will.[45] When the Russians attacked on 1 January 1995, they did not isolate the city until 12 January. When Chechnya and Grozny were finally isolated, the militants' normal resupply system was disrupted; and they began to experience supply shortages. In this way, the Russians were able to gain some ground.[46]

The Russians further applied this lesson in 1999 and 2000 using ground and air power to isolate the defenders from external support.[47] One critical type of equipment the Russians were able to limit the resupply of is communications equipment. The Russians were not able to completely prevent the Chechens from acquiring foreign communications devices, because some of these devices were remaining from the previous fighting. Motorola's Iridium satellite system handsets were successfully used in 1995 and 1996 in Grozny. The Russians did take actions to limit Chechen communications, which is discussed in greater detail in the next section of this chapter.[48]

The Chechen independence movement uses the Bank of America in Sacramento, California to collect financial support from people living in the US. The Chechen rebels use a website called, www.amina.com/help, to collect contributions to support their units. The website says it uses contributions for refugee relief. However, any money sent to the bank is

used by the rebels to support their fight against the Russians.[49] It is logical to assume that the Russians would like to prevent these funds from reaching the Chechen fighters.

Osama bin Laden sent 650 men to support the Chechen rebels in Grozny.[50] Bin Laden also makes financial contributions to the Chechens. He makes $250 million available to Islamic militants around the world. It is unknown whether or not the Russians successfully stopped the transfer of money from Bin Laden to the Chechens.

Isolating support is probably the most critical component of isolation, but the effects of isolation are greater if the enemy is also isolated in other ways. The next component is to isolate the defender's command, control, communication, computers, and intelligence systems (C4I).

## Isolate Command, Control, Communications, Computers, and Intelligence Systems

Isolating the defender's C4I contributes to attacking soldier will and unit organization which causes the disintegration of the enemy's unit. Attacking the enemy's C4I degrades unity of command, unity of effort, synchronization, and cohesion.

C4I are the systems used by an organization to execute command and control functions based on friendly and enemy intelligence. The parts are used together to compliment each part, and create an effect that is stronger than the part can achieve separately. Attacking a single part will damage part of the C4I system, but the other areas often assume a greater role to make-up the deficiency. Attacking the entire system simultaneously magnifies the disruptive effect on the enemy's organization, causing disintegration of the organization and its soldiers' will to resist.

Command and control is the exercise of authority by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control

functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission.[51] "Control ensures that deviation from the object to be attained is minimized and unity of effort is achieved."[52]

Command and control is enhanced by reliable communications. Communications are high and low technology based. High technology, such as radio, standard and cellular telephone, television, radio scanners, are available in expensive, off-the-shelf technology, or already existing as an establish telephone network. Computers also enhance communications when the computers are linked by a network, or Internet. The attacker seeks to disrupt communication between a higher headquarters and subordinate elements, regardless of the system the enemy is using, or the nature of the defender's organizational structure.

Against the threat encountered in Haiti, Somalia, and Sierra Leon, command and control is not traditional in the western perspective. Low-tech communications can synchronize enemy elements nearly as effectively as high-tech systems. The measure of success is not in the cost of the equipment, or number of circuits, rather the effects the system achieves. If an enemy is able to communicate through visual signals, either conveying or triggering a mission that can be acted on, and making adjustments to the plan based on the oppositions reaction, then the enemy has effective communication.

Throughout the entire C4I system information and intelligence is communicated. Information is data collected from the environment and processed into a usable form. Knowledge is information that has been tested and accepted as fact. Knowledge is used as the basis for decisions.[53]

Information superiority is the operational advantage derived from the ability to collect, process, and disseminate an uninterrupted flow of information while exploiting or denying an adversary's ability to do the same.[54] It is an operational advantage that allows commanders to

make better, faster decisions, while degrading enemy decisions and actions and affecting perceptions and attitudes.[55]

Information superiority is achieved by offensive and defensive operations. Information operations include acquiring, using, protecting, managing, exploiting, and denying activities.[56] Offensive information operations include the elements of electronic warfare: electronic attack, protection, and warfare support psychological operations, physical destruction, counterintelligence, computer network attack[57] Information operations use the combined effects of psychological operations, electronic warfare, physical destruction and military deception to divert, limit, delay, damage, and destroy the adversary's C4I. At the same time the US uses operations security and electronic warfare to protect US C4I systems. The effects on the adversary's C4I are increased through psychological operations, civil affairs, and public affairs.

Degrading C4I affects the enemy's unity of command, unity of effort, synchronization, and cohesion. Attacks on a defender's C4I are conducted in several ways. The opposition's C4I is attacked by intercepting or jamming cell phone connections, radio traffic, and television and radio broadcasts. Controlling telephone service to allow normal use by non-combatants, while retaining the ability to shut-down the system during tactical action to prevent the enemy from communicating is another way of attacking the defender's C4I. Additionally, telephone wire taps will allow the attacker access to enemy information. Attacking enemy websites prevents communication internal and external to the organization. Anti-radiation missiles, and directed energy weapons destroy enemy communication and computer systems. These activities are supported by detecting, identifying, locating, and exploiting enemy signal emitters. An attacking force may control city's television and radio broadcasts in an effort to control enemy information operations and communication between enemy units.[58]

By using the urban environment to mitigate US advantages, the enemy could also make its source of power, soldier will and unit organization, more vulnerable. The compartmentalization created by buildings, rooms, hallways, floors, and tunnels isolates the

enemy into smaller elements. The isolation is begun by the defender and increased by the attacker when the enemy's C4I is destroyed. When the defender's ability to communicate between its small elements is degraded the actions of the elements cannot be synchronized, and lack of information increases anxiety among the soldiers of these isolated elements. These effects are further exploited through psychological operations and information operations. The defender's information void is filled by the attacker's psychological operations with information that heightens anxiety among soldiers. Psychological operations attack the enemy control mechanism, its predetermined goal, causing the threat to lose direction, purpose, and adaptability, eliminating its ability to respond asymmetrically or in new ways.[59] The effects of isolation, which cause the disintegration of the enemy's organization are described by Doctor James Schneider, of the US Army's School for Advanced Military Studies,

> Cybershock creates paralysis in five ways. First through the use of operations security, deception operations and psychological operations the enemy is denied complete information both of his adversary and himself. Second, electronic warfare (EW) destroys the organizational coherence and cohesion of the target, essentially inducing a kind of epileptic seizure in the opponent's nervous system. Third, active and intense reconnaissance blinds the enemy and becomes the most critical element in the struggle for information. Fourth, the shock of surprise places a tremendous burden on the enemy's nervous system as it creates a broad state of panic. Finally, the activeness and rapidity of friendly operations induces a kind of cybernetic stupor in the enemy: his nervous system goes into overload and general dissonance sets in. Paralysis and disorganization is complete.[60]

An enemy using the city in an asymmetric strategy begins the process of isolating its soldiers just by occupying the city. Buildings divide platoons, floors separate squads, and walls further separate a defender into fire teams and individuals. One squad may defend an entire city block. This isolation begins the disintegration of units because communication begins to breakdown. Noted military author, SLA Marshall wrote,

> I hold it to be of the simplest truths of war that the thing which enables the infantry soldier to keep going with his weapons is the near presence or the presumed presence of a comrade. The warmth that derives from human companionship is as essential to his employment...the other man may be almost beyond hailing or seeing distance, but he must be somewhat within a man's consciousness or the onset of demoralization is almost immediate and very

quickly the mind begins to despair or turns to thoughts of escape. In this condition he is no longer a fighting individual... He is sustained by his fellows primarily and by his weapon secondarily. Having a choice in the face of the enemy, he would rather be unarmed and with his comrades around him than altogether alone, though possessing the most perfect of quick-firing weapons.[61]

Due to decreased communication, soldier's will is damaged as the soldier feels isolated from the other members of the unit. The separation is different than in less complex environments. A distance of a few feet, with a wall between them, will isolate two soldiers the way several hundred meters divides soldiers in open terrain. Each room contains its own fight, mutual support breaks down with the introduction of walls and floors. Therefore, at the same time a defender uses an urban area to mitigate their own numerical inferiority, the defender forces its soldiers to fight in isolation, starting the disintegration of its own unit. The attacker must take advantage of the isolation of the defender's soldiers, and prevent its own soldiers from feeling the same effects by fighting at no lower than fire teams, and maintaining communication. Unfortunately for the Russian military in the first battle for Grozny, the Chechens isolated the Russians by disrupting the Russian's C4I. The Russians made nearly no attempt to defeat their opponent's C4I, despite the Chechens reliance on vulnerable systems. In the more recent battle, the Russians effectively applied the lessons they learned from the first battle.

## Russian Isolation of the Chechen's C4I

The Russian military did not use effectively employ lethal and non-lethal fires to cut-off President Dudayev's communications when Russian operations began in 1994. The separatist movement based their C4I on low technology procedures, cheap, off-the-shelf systems, and existing mass media and civilian communications infrastructure. Disrupting and destroying the militant's C4I systems was within the capability of the Russians, however over-confidence led the Russian commanders to disregard the necessity of isolating the rebels.

The Russian Air Force did not destroy the Grozny TV tower until 21 December, seven days into the 1994 assault on Grozny.[62] Chechen mobile television stations operated unhindered, overriding Russian TV transmissions, allowing Dudayev to deliver messages designed to favorably influence local, Russian, and international opinion of the Chechen's independence movement. Mass media infrastructure was targeted early using lethal and non-lethal fires before the second assault.

Once again, Russian forces did not attack the separatists computer systems until the second Grozny battle. Islamic fighters used the Internet for command and control, and external and internal personnel, financial, and material support.[63] Although the rebels used computers during the both battles, the Russians made more attempts, and limited the Chechen's use of computers more effectively in 1999 and 2000. Chechen command and control in Grozny was enhanced by using a computer to keep track of rebel locations.[64]

Before the 1995 assault, Russian military forces did not disrupt Chechen use of cell phones. Later, in 1996 Russian forces used cellular phone signals to target rocket fire, which appears the most likely explanation for President Dudayev's death.[65] Learning from its mistakes, the Russians used air forces to destroy cellular relay towers and communication facilities in the most recent fighting.[66] Although the militants were still able to use cell phones, probably using relay stations in Dagestan and Ingushetiya, the Russians degraded this communication asset.[67]

Russia's failure to disrupt Chechen communications became an even greater problem as the Russians learned that the Chechens communication is more effective in the city than their own communication capability. The Chechen rebels also used cheap, over-the-counter communication devices, scanners, and ham radio operator systems to overcome the problems of communicating in the city. Chechen commanders used facsimile devices, leased satellite frequencies, and cellular telephones.[68] Cellular telephones offered better communications than the Russians' frequency modulated (FM) radios, and commercial scanner systems were used to

listen to Russian radio conversations.[69] The Russians did not start monitoring the rebels' cellular telephone calls until April 1996.[70]

The Russians did not protect its radio nets during the first period of fighting, however they did in the recent battles. In the January 1995 battle for Grozny, "[the Chechens] would listen in to Russian units on a captured radio set. When it sounded as if they were in trouble and calling for instructions, one of the Chechens would grab the receiver and shout commands to retreat."[71] The Russians used this trick against the Chechens in 2000 when the Russians passed reports over fake radio nets to portray weakness on an area of the blockade around Grozny. When the rebels perceived weakness in the blockade they tried to escape into the countryside. The Chechens attempting to escape the city were attacked by Russian blocking forces and minefields.[72] In one of these escape attempts Shamil Basayev lost his foot by stepping on a land mine.[73] Learning from previous mistakes, the Russian military prepared for the recent attack on Grozny by fielding secure communications at all levels, down to sniper teams.[74]

Isolating the enemy's C4I decreases enemy cohesion. The Chechen separatists are especially vulnerable to tactics that undermine their cohesiveness due to the numerous factions that exist in their movement. In Chechnya there are fifty different languages and hundreds of clans.[75] Chechen leaders cannot control their armed forces or the military leaders.[76] Factions can unify in their efforts against the Russians; however, each faction is committed primarily to its own clan, territory, resources, and power.

Two aspects of information operations that the Russians did not make any attempt to conduct are, shaping Russian and local opinion; the Russians did neither in 1995, but the Chechens did successfully. The Russians did implement the earlier lessons they learned from the Chechens and used information operations to shape Russian opinion.[77] In December 1999, the Russians used Resolution Number 1538 to create the Russian Information Center and filter all information going to the mass and foreign media. Reporting is censored, and access to combatants is controlled.[78]

## Control Key Infrastructure

Control of key infrastructure contributes to the disintegration of the enemy because lack of control of key infrastructure negatively affects soldier will. Infrastructure is a substructure or underlying foundation; especially the basic economic, social, or military facilities and installations of a community, state, etc.[79] Included in infrastructure are transportation facilities and vehicles, utilities, health facilities and services, law enforcement, grocery stores, structures that are socially, politically and culturally significant. The force that controls key infrastructure logistic needs are met, such as food distribution, water, electricity, and medical support. C4I is supported with telephone services, mass media facilities, and computer networks, all of which are key infrastructure. Control of these infrastructure adds to a force's legitimacy because water, electrical, telephone, education, and medical services are services legitimate governments are expected to provide. Actually, protection of government buildings by friendly forces has a generally salutary effect on government leaders and local populations in the urban areas.[80] For example, a decisive point after Hurricane Hugo was re-opening schools because it contributed to a feeling of "normalcy" in the lives of people affected by the hurricane.[81] A friendly force's control of key infrastructure prevents the enemy from leveraging control of the infrastructure for their own advantage.

A city's infrastructure is built to support the city's inhabitants. It enables the population to travel to work, live in sanitary conditions, receive medical care, drink fresh water, buy food, and use appliances. Businesses operate manufacturing equipment, run computers, maintain business communications, sell, buy, and transport products, and conduct financial transactions.

An example, illustrating the myriad considerations an attacker must make for just one key infrastructure system is the telephone service. Telephones are used by the city's inhabitants for a variety of reasons, communicating with family, running a business, or requesting emergency aid. If the attacker is seen as legitimate by the non-combatants, the civilians may

use the telephone to provide human intelligence to the attacker. The importance of this service must be analyzed from the point of view of the civilian population, the defender, and the attacker. An attacker analyzes the telephone system to determine the importance of the telephone system in three areas: how it could control the infrastructure to accomplish its mission without needlessly disrupting the lives of non-combatants; how it can use the telephone system to disrupt the enemy's defense; and how its organization could use the telephone system to accomplish its mission.

A defender can use the telephone system for communicating within its organization to enhance command and control by coordinating and synchronizing operations and logistics. This communication is an important way to maintain contact with individual soldiers and small elements dispersed throughout the city to limit feelings of isolation among these soldiers. Additionally, a defender may use telephones to communicate with the city's non-combatants for material, personnel, or moral support. Telephones also allow the defender easier access to supporters providing external material and financial supporter. Defenders use the telephone to contact international organizations and governments to gain support for their cause.

The attacker could destroy the telephone system, disregard it, protect it, disrupt it, use it, exploit it, or any combination of these options. Just using one of these options, exploiting the telephone system, demonstrates more complexity in planning considerations for key infrastructure. The attacker may want to exercise covert control over the telephones by tapping the system. Wire tapping would allow the attacker to covertly listen to the defenders plans to gain information. The attacker could also choose to control the telephone system by using malicious computer code to disrupt service temporarily. In addition, the attacker may also temporarily shutdown the telephones early in the assault, but use the telephones to enhance their own communication later in the attack and during consolidation. The attacker may destroy the telephone system, but restore service immediately following the attack to support civilian use of the telephones. Planners must consider the different uses of each infrastructure system in the

city. The Russian military demonstrated a poor understanding of this concept in their attacks on Grozny.

## Russian Control of Key Infrastructure in Grozny

The difficulty in using Grozny as a case study is that the Russians raized the city. The case study does show that the Russians initially identified and sought to control several key infrastructure before resorting to total destruction of Grozny. November 1994 planning guidance issued by LTG Anatoly Kvashin, North Caucasus Military District commander, focused on rapid seizure of the Chechen opposition's critical communication nodes, the Presidential palace, and the rail road station.[82] At the end of December LTG Kvashnin continued to focus on key infrastructure in Grozny. The Russian commander planned to attack from the north, west and east Russian to seize the presidential palace, the government, television and radio buildings, and the railroad station.[83] Russian planners selected the railway station and capital building in Grozny.[84] Emerging US doctrine advocates attacking on a narrow front to penetrate the outer rings of the defenses and seize key terrain.[85]

The Russians did not try to reduce destruction of essential services in Grozny. In 1994, in the midst of winter, by 25 December only twenty percent of Grozny had electricity, and fifty percent had gas.[86] Since the Russians failed to consider the uses of each key infrastructure, the Russian attacks only made people miserable, instead of degrading an enemy capability. By 29 December Russian forces failed to seize the airfield at Khanvala, allowing the Chechen's to use the airfield for logistics missions.[87]

The Russian commanders learned from mistakes made during the 1994 to 1996 fight for Grozny. In January 2000 Minutka Square was designated as key terrain because many roads and underground communication lines met in the square. Control of Minutka Square would compliment movement throughout Grozny. This is an improvement in the Russian's

understanding of urban key terrain, in January 1995 the Russians designated President Dudayev's Presidential Palace as key terrain.[88]

The Chechen defenders also felt several key infrastructure were important to control. Dudayev's military commander, Aslan Maskhadov, also a former senior Soviet military leader directed the emplacement of defensive positions key avenues into the city, and further inside Grozny near highway entrances, residential areas, bridges, oil fields, and chemical plant, finally ending with a third ring around the palace.[89] Several of these areas are part of the last factor of isolation, control avenues of approach.

The infrastructure also support the city's transportation and the rebel's resupply routes, such as the main avenues in the city, bridges, and highway entrances. Oil fields and chemical plants are also key infrastructure because the finished product from these plants support the Chechen economy and supply the defender with important petroleum products and chlorine for mines. Residential areas are important because the control of these areas lends an element of legitimacy to the rebel's fight for independence. Control of residential areas also increases the support a defender may expect from non-combatants, an element of external and internal support. The defender can expect more support with increased control because the defender's control of infrastructure establishes legitimacy with the city's inhabitants.


## Isolate by Establishing Greater Legitimacy

Inhabitants of a city must no longer be viewed as "hapless spectators," as they are described by doctrine in FM 90-10 *Military Operations on Urbanized Terrain.*[90] The center of gravity of a city is the population.[91] People must be considered in the desired end state and support requirements.[92] Current doctrine, FM 3-0, recognizes the need for gaining support from the city's population and media.[93] JP 6-03 highlights the need for planning specifically focused on the civilian population,

> Despite constraints and restrictive rules of engagement civilian casualties, destruction of property and disruption of basic services, cause mass refugee movements and criminal activity. To overcome this commanders must plan to mitigate suffering by restoring service, limiting destruction, and protecting civilian lives as well as infrastructure.[94]

As planners consider the utility and fate of a city's infrastructure, discussed in the previous section, they must weigh the costs and benefits to the mission of destroying the service. Costs include the human suffering that may result, ability of the attacker to restore or replace the service, and the need to establish legitimacy with the people living within the city. Once again, the interdependence of the factors of isolation is brought forth.

One method of mitigating potential civilian death and property destruction is by using non-lethal weapons. Non-lethal weapons are less likely to cause escalation of violence and less likely to draw in less committed onlookers. Non-lethal weapons raise less public protest.[95] Use non-lethal weapons to reduce collateral damage and non-combatant deaths, thus avoiding alienating the population and increasing legitimacy by demonstrating the desire to protect non-combatants.

Limiting non-combatant suffering is also achieved by establishing safe areas. Providing security and services in the safe areas also contributes to legitimacy, because these are services a legitimate government provides people. The attacker's legitimacy psychologically isolates the defender from the city's civilian population. At the same time the safe areas security physically isolates the enemy from non-combatants. The availability of health services, safety, NGO support, as well as housing and food in the safe area are incentives to encourage urban dwellers to move to the safe areas. Safe areas may exist inside or outside the city.

The safe areas are not havens for militants disguised as non-combatants. Detecting the difference between combatants and civilians becomes difficult. Establishing checkpoints at the entrances into the safe areas limits the likelihood combatants will get into the safe area.

No matter what enticements are offered, some civilians may refuse to leave their familiar surroundings. The more non-combatants who are removed from the city, the easier units can conduct operations without causing further non-combatant deaths. Removing non-combatants requires a significant effort, but so does resolving problems created by civilian deaths and the resultant outcry of the international community. The Law of Land Warfare requires that the operational commander make local agreements to remove wounded, sick, infirm, elderly, children, maternity cases, ministers, medical personnel, and medical equipment from the isolated areas. The commander is not, however, required to allow any other inhabitants to evacuate a city.[96]

Information operations should enhance the attacker's effort to establish legitimacy with the civilian population, further psychologically and physically isolating the defender. Information operations must exploit the fact that citizens of a city or country may oppose their military turning their neighborhoods into battlefields.[97] If a government or military does not have the support of the city's population, then human intelligence can make up for degraded signal intelligence, imagery intelligence, communications intelligence, measurements and signals intelligence. Just the mere fact that there are many people in a city makes the availability of human intelligence more possible.[98] When this legitimacy is established, the local population may by more willing to aid friendly forces.[99] All forms of information gathering are facilitated by forming a National Intelligence and Surveillance Teams.[100]

Establishing legitimacy is made more difficult by social struggles between competing groups in the city.[101] An attacker must carefully decide who and how to support the groups involved in the conflict, while remaining neutral, in an attempt to have the broadest degree of legitimacy possible. This becomes more difficult as the "human architecture" becomes more complex.[102] Even within the defenders organization factions may exist that an attacker should exploit. This consideration for divisions within the civilian population and the enemy must also include that an attacker may gain achieve success by allowing the people to solve their own

problems. Peters describes this as "self-organization." Self-organization acknowledges that laws and regulations do not organize all the activities in a city.[103]

## Russian Legitimacy with Grozny's Civilians

In 1994 the Russians initially enjoyed legitimacy with the majority of Grozny's civilians, many of whom were ethic Russians.[104] The Russians lost this support due to the Russian military's apparent lack of consideration for non-combatants.

One way the Russian leaders lost legitimacy is by overlooked the need to communicate with non-combatants. The Russian army did not deploy civil affairs units in Grozny.[105] Civil affairs units help leaders identify conflicts between civilians and military personnel, such as the many unpunished acts of looting and murders Russian soldiers committed against unarmed civilians.[106] Russian civil affairs personnel also could have communicated to the Chechen citizens that the rebels were using them as human shields. Communicating this information to the Chechen people would enhance Russian military legitimacy. Instead of gaining legitimacy, the Russians had to fight the city's non-combatants as well as the rebels. Russian military commanders reported that, " trucks of young Chechen volunteers... arrived to reinforce the illegal formations... under the guise of civilians, arrive in the center of Grozny allegedly to bury killed relatives."[107]

In 1999 and 2000 Russian psychological operations portrayed the rebels as Muslim fanatics, and supporters of international terrorism, linking the Chechens to Osama bin Laden.[108] This use of psychological operations, in the second battle, is another example of the Russian military's desire to enhance their legitimacy in Chechnya and at home.

Although safe areas and corridors were not established by the Russians during the first fight for Grozny, these techniques were used in 1999 and 2000 before fighting began. The Russian military did this with a safe corridor leading from Grozny to refugee centers.[109]

Enough time must be planned by the JTF to allow the non-combatants to evacuate an area. The Russians had to change their first deadline because an estimated 10,000 to 50,000 non-combatants remained in Grozny after the deadline.[110] Some were too sick to leave the city, while others were afraid of attacks by the Chechen rebels.[111] The difficulty of processing thousands of refugees at the safe corridor checkpoint also contributed to the need to delay the deadline.

Not all residents evacuated Grozny. When the Russians attacked in January 2000 there were still 20,000 to 30,000 non-combatants hiding in the city. In the month prior to this offensive, the Russians warned residents to leave the city in, but these people were too afraid, too feeble, or too isolated to attempt to move out of Grozny.[112]

Russian leaders made additional attempts to gain legitimacy with the Chechen civilians before the 1999 attack into Grozny. In October 1999, the Russians released former Grozny Mayor Bislan Gantamirov and made him head of the Chechen police force. Using a Chechen is an attempt to establish legitimacy with the Chechen people.

To further establish legitimacy Gantamirov reorganized the law enforcement system to bring law and order to Chechenya. Providing law enforcement is a basic service any legitimate government provides. Using Chechen police officers to fight Chechen militants reduced language and cultural barriers. This also allowed Russian forces to obtain critical intelligence on rebel locations.[113]

## Isolate by Controlling Multi-Dimensional Avenues of Approach

Control of the multi-dimensional avenues of approach contribute to isolation of the defender by enhancing the attackers ability to achieve success in the other four factors of isolation. Controlling the avenues of approach prevents enemy movement of logistics, reduces the defender's ability to communicate, attacks cohesion, and limits the defender's ability to

control infrastructure. The effects created by denying the enemy's use of avenues of approach attacks soldier's will and unit organization. After small units are isolated, by preventing movement on avenues of approach, they are vulnerable to PSYOPS. Isolated enemy will be susceptible to fear.[114]

The multi-dimensional avenues of approach in urban operations consist of airspace, borders, roads, and surrounding countryside; upper and lower levels created by buildings; and subterranean networks. Isolating an enemy throughout all dimensions requires detailed coordination and unity of effort. Operational commanders have most of the assets required to isolate these avenues of approach; however, some actions will require NCA support.

Airspace is easily controlled by U.S. air power, but our most effective weapons platforms in the urban environment, attack helicopters, are vulnerable to the enemy's shoulder-launched anti-aircraft missiles. Tall buildings in urban areas reduce the effectiveness of missiles. The skyline of the city is an important consideration when planning ingress and egress routes. In addition to using tall buildings to inhibit attacks from antiaircraft missiles, a commander can use unmanned aerial vehicles (UAVs) in place of aircraft in areas where there is a significant shoulder-fired anti-aircraft rocket threat. In an urban environment battalions need direct UAV support. The UAVs offer greater freedom of movement in the air, as well as information that can aid ground forces in controlling the other dimensions of the battlespace. Missiles will also become less of a threat as the enemy's equipment fails missile supply is depleted and cannot be restocked.

Access to a country and a city is not only by air routes, as discussed above, access is also gained through ports, railroads, and highways. The significance of isolating the enemy at country and city borders and surrounding countryside is to prevent the enemy from receiving reinforcements and supplies from external and internal sources. These areas are controlled through security areas, off-limits areas, and safe areas and corridors. Control is enforced through air and ground patrols, sensors, observation posts, and reaction forces, on land, sea, and

air. Close air support, artillery, and armor assets would provide units with superior firepower. Using these assets at borders and in the countryside outside the urban area will give friendly units responsive firepower, without causing undue collateral damage.[115]

Employing operational fires against enemy training and logistics bases, inside or outside the country, is yet another way the operational commander can further isolate the enemy. Safe corridors, controlled by checkpoints, should be established to allow non-combatants to maintain the country's economy, while the remaining areas surrounding the city are sealed off. Temporary and random checkpoints will surprise and isolate the defender by disrupting the enemy's supply routes.

Rooftops, upper and lower floors, and streets can also be monitored by restricting the movements of non-combatants, by emplacing sensors, and by coordinating air and ground patrolling and reaction forces, snipers, and observation posts. If numbers of friendly forces are limited, supplementing manned positions with sensors and occupying areas that allow observation of several areas from one position will still provide the information the attacking forces need.

Any subterranean access into the country and city should also be controlled. Subterranean networks include sewers, walking tunnels, and subways. These are extensive in most cities. A combination of off-limits areas, safe corridors, monitoring sensors, and reaction forces will aid in controlling this underground world. Sealing accesses to subterranean networks, such as sewer manholes, limits combatant use of the underground system. Control of subways, which are needed for the normal functions of the city, are controlled through open access or checkpoints. For passages that must remain open, sensors used at entrances, key intersections, and exits to detect movement of personnel at unusual times and equipment that may be of military value will help identify movement by combatants. The information gained from sensors is used to track the movement of enemy supplies to their source and distribution points. Reaction forces may deploy immediately to intercept the enemy or wait. This course of

action provides several advantages for the attacking forces. The threat of a baited ambush is reduced. Additionally, offensive actions are better focused on the enemy, instead of searching blindly in terrain-oriented actions. Since actions are enemy oriented, fewer numbers of troops are needed because the areas are seized only temporarily while the enemy and equipment is captured or destroyed. Then the reaction forces withdraw from the area, removing the enemy's ever-decreasing resources and preventing the enemy from engaging the friendly forces. Friendly forces can better able to exploit the element of surprise.

The significance of isolating the enemy at country and city borders and surrounding countryside is to prevent the enemy from receiving reinforcements and supplies from external and internal sources. These areas can be controlled through off-limits areas and safe corridors. The off-limits areas will be enforced through air and ground patrols, sensors, observation posts, and reaction forces, on land, sea, and air. Close air support, artillery, and armor assets would provide units with superior firepower. Using these assets at borders and in the countryside outside the urban area will give friendly units responsive firepower, without causing undue collateral damage.[116] The Russians were much more methodical in their approach to isolate the avenues of approach before they attacked Grozny in 1999.

## Russian Control of Avenues of Approach in and around Grozny

One reason the Russian military failed to isolate their opposition by controlling the avenues of approach is because the Russians lacked unity of effort. The Russians' main effort advanced into Grozny on 1 January 1994, with the understanding that two supporting attacks would also occur. Execution of the supporting attacks was falsely reported by unit commanders. This allowed the Chechens to isolate and destroy the Russian main effort. Later attacks give evidence of similarly fragmented effort as planned support from special forces, helicopters, and infantry attached to tank units never materialized.[117]

The Russian attackers also failed to completely control all avenues of approach into

Grozny. This was a strategic failure by the Russians because it allowed the rebels to maintain

open lines of communication between Grozny and the rebel held countryside and villages to the

south.[118] Russian failure to block the south side of Grozny using key terrain and avenues of

approach was due to poor planning. Some supporters of the Russian military may argue that the

south side was intentionally left open to allow escape and trap the rebels in the mountains,

however there is no evidence that this was the Russian's intent.[119] One reason for poor planning

is that Russian planners lacked good maps in 1994 and 1995. The Russians corrected this

problem in 1999.[120] This error by the Russians seems even more unforgivable considering that

123 roads lead into Grozny.[121]

Planning for the 1999 attack by the Russians was more detailed than for the 1994

attack. Lieutenant General Gennady N. Troshev, first deputy commander of the Combined

Troop Grouping, described the preparation the Russians conducted before entering Grozny.

Planners "painstakingly studied not only the streets and routes of approach to some regions of

the city, but also to all its public utilities. We raised all the archives, found maps…based on

them we determined where sewage lines are and how and where the heating lines go… there are

labyrinths as tall as a man and two to three meters wide. Therefore, before we began to storm

the city, combat engineers and reconnaissance personnel went out to these public utilities."[122]

The Russians sought to control subterranean networks because Chechen mobility was enhanced

through the use of interconnected firing positions and sewer networks.[123]

Lieutenant General Troshev said the plan for defeating the Islamic militants was to

blockade Grozny, and destroy the militants using fire support assets. While the Russians

entered the city, other forces continued to enforce the control of avenues of approach,

preventing Chechen reinforcements from entering the city, and organized withdrawal from the

city.[124]

The Russians established control of the avenues of approach in several ways. In the second attack on Grozny, in December 1999, the Russians used four sniper companies, made up of fifty to sixty snipers each. Their mission was to kill the enemy, provide intelligence on Chechen locations and movement, and direct indirect fire. The sniper teams were supported by the army.[125] Russians complimented the sniper companies by using radar effectively to detect movement in the city. The radar became more effective as non-combatants left Grozny.[126] Reconnaissance units, and probably unmanned aerial vehicles, were used to call artillery fire from remote locations, further demonstrating that the Russians attacked with unity of effort in 1999.[127] Fires were used on remote approaches into Grozny to prevent the enemy from concentrating against Russian troops.[128] By doing this, the Russians took away the Chechen's freedom of maneuver. Denying the Chechen's freedom of maneuver was critical for Russian success because Chechens occasionally moved out of the city and attacked the rear of the Russian units.[129]

Russian units further enhanced their control of Grozny's avenues of approach by employing a spider web method of penetrating into and dividing the city into sections.[130] The spider web method uses several large roads that converge from the outskirts of the city into center of the city, similar to the spokes on a wheel. The large roads, or "spokes" are connected by side roads, forming a spider web pattern. These lines of communication are protected to allow Russian units to separate enemy units, while still allowing Russian units to reinforce each other.

The Russian military negated the rebels' missile threat by capturing tall buildings and planning ingress and egress routes using the captured buildings for cover.[131] Russian use of airpower significantly enhanced the Russian's control of avenues of approach into and within Grozny.

# Chapter 3: Conclusions and Recommendations

## Conclusions

Russia's isolation of the Chechen militants, followed by a successful attack, forced the rebels to withdraw from Grozny. It appears that the effects of isolation, followed by heavy casualties, brought the disintegration of the Chechen force, offering the Russians a chance to annihilate the militants. The routes out of the city, which the Chechens felt were open were mined by the Russians, causing further casualties. One of the Chechen casualties in an escape attempted was Shamil Basaev, one of the most respected Chechens. These casualties caused further disintegration of the rebel units, allowing greater opportunity to the Russians to bring the final defeat of the Chechens.[132]

Urban operations are not easy. The Russian military expended significant resources to defeat the Chechen rebels in Grozny. The fighting in Grozny demonstrates that a weak opponent can inflict heavy damage, and possibly achieve its political aim, against a large military organization.

Isolating the Chechen defenders made the Russian military's second attack on Grozny much more successful that the first. The effects of isolation caused the disintegration of Chechen rebel units, which allowed the Russians to effectively use attrition to bring the final defeat of their enemy.

Isolation reduces the defender's effectiveness because the defender cannot sustain its forces, exercise command and control, exploit key infrastructure, retain legitimacy with noncombatants, and control avenues of approach.

## Recommendations

An attacker should begin isolating the enemy as early as possible. At the strategic level isolation begins politically and economically when sanctions are imposed against one nation-

state by another nation-state. To achieve the effects of isolation at the operational and tactical levels, interdiction of an opponent's supply of arms and ammunition must begin before the enemy makes it final preparation to fight. Isolation at the three levels create complementary effects on the enemy.

Isolation is accomplished using a joint force. Each service contributes to the complete isolation of an opponent because the enemy is isolated by denying them the freedom to maneuver at sea, in the air, or on land. For example, even against a land locked opponent, a navy must halt military equipment at sea that is intended for an opponent before the equipment passes through a neighboring country's port.

United States doctrine must reflect the importance of isolating the enemy more prominently. The first draft of JP 3-06 devotes some discussion of isolation in shaping operations. The effects of isolation are not discussed in relation to the importance of culture, and infrastructure. Army MOUT doctrine does not devote a single word to isolation. Marine Corps doctrine acknowledges isolation's importance, but does not discuss the details of how to isolate, or its effects on the enemy. Measuring friendly and enemy will is difficult, but the difficulty of measuring an effect does not diminish its value.

Doctrine and training must also teach U.S. military personnel how to establish legitimacy with non-combatants to prevent themselves from suffering the effects of isolation. Cultural training, restoring infrastructure, mitigating suffering, and information operations help establish legitimacy. These issues require discussion in doctrine and integration in training to make U.S. forces aware of the effects. Replicating the effects of isolation at training centers will show commanders and soldiers the benefits of isolation to weaken the enemy before an attack.

Employing isolation is one way that U.S forces can counter a determined opponent's asymmetric strategy. When U.S. forces isolate an enemy, they take advantage of the enemy's position, instead of allowing the enemy to exploit the U.S. military's weaknesses in the urban

environment. While the U.S. military can not hope to dictate the environment in which

operations will occur, we can tear-up the enemy's script.

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